

ANNOUNCEMENTS

2ND SYMPOSIUM ON THEORETICAL ASPECTS OF COMPUTER SCIENCE

January 3–5, 1985, Saarbrücken, Fed. Rep. Germany

The *Symposium on Theoretical Aspects of Computer Science* is organized jointly by the Special Interest Group for Theoretical Computer Science of the Gesellschaft für Informatik and the Special Interest Group for Applied Mathematics of AFCET.

Typical, but not exclusive *topics* of interest include:

algorithms and data structures, automata and formal languages, computational complexity, cryptography, logic and semantics of programming languages, mathematics of computation, theoretical studies of computer systems, theory of data bases, theory of parallel and asynchronous computation. VLSI structures.

Program Committee:

G. Berry (Ecole des Mines), D. Perrin (Paris), G. Vidal-Naquet (Supelec), M. Broy (Passau), O. Spaniol (Frankfurt), F.R. Olderog (Kiel), G. Ausiello (Rome), J. Karhumäki (Turku), B. Chazelle (Brown), F. Preparata (Illinois), W. Paul (IBM, San José), M. Fontet (Paris), K. Mehlhorn (Saarbrücken).

Symposium Chairmen:

M. Fontet – Université Pierre et Marie Curie, Paris, France
K. Mehlhorn – Universität des Saarlandes, Saarbrücken, Fed. Rep.
Germany

Authors are requested to submit 7 copies of a draft paper of 5–10 pages to the program chairman:

Prof. K. Mehlhorn
Fachbereich 10
Universität des Saarlandes
D-6600 Saarbrücken
Fed. Rep. Germany

Dates:

- Deadline for submission: 15 August 1984
- Notification of acceptance or rejection: 1 October 1984
- Deadline for final text: 4 November 1984

Accepted papers will be published in the proceedings of the symposium (Lecture Notes in Computer Science). Conference languages are English, French and German. The symposium will be held on the campus of the Universität des Saarlandes in Saarbrücken, Germany. The symposium is organized in cooperation with EATCS and IEEE Computer Society Technical Committee for Mathematic Foundations of Computer Science.

JOINT CONFERENCE ON THEORY AND PRACTICE OF SOFTWARE DEVELOPMENT (TAPSOFT)

March 25–29, 1985, Berlin, Fed. Rep. Germany

TAPSOFT is an international *Joint Conference on Theory and Practice of Software Development*, and comprises three parts.

Colloquium on Trees in Algebra and Programming (CAAP'85)

The preceding colloquia on Trees in Algebra and Programming were held in France and Italy as autonomous conferences. In 1985 CAAP will be integrated into the TAPSOFT conference.

In keeping with the tradition of CAAP as well as with the overall theme of the TAPSOFT conference, CAAP'85 focusses on the following topics:

- formal languages and automata
- string, tree and graph rewriting systems
- semantics of sequential and parallel programs
- complexity and verification of algorithms and programs
- theory of data structures and data bases
- abstract data types
- formal specifications for software systems

In addition to these topics, contributions from other areas of theoretical computer science are also welcomed, especially if they are related to problems arising in software development.

Program Committee for CAAP'85

A. Arnold (France)	M.C. Gaudel (France)
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Program Committee Chairman of CAAP'85

Prof. Dr. Hartmut Ehrig
 TU Berlin, Sekr. FR 6-1
 Franklinstrasse 28/29
 D-1000 Berlin 10 (West Germany)

Advanced Seminar on the Role of Semantics in Software Development

Concepts of semantics have been proposed as a theoretical basis for several areas of concern in software engineering. Whereas some see the promotion of formal semantics as an important step towards improving the software development process, others remain sceptical as to the benefits of such formal approaches. The aim of this seminar is therefore to bring together leading experts in the fields of formal semantics and software engineering to enable them to present their own work and their views on the role of semantics in software development, and to provide a forum for discussions between seminar speakers and all other conference participants.

The advanced seminar is organized in three sections focussing on the following topics:

- concepts of semantics with a view to software development
- the role of semantics in language design
- the role of semantics in the development of software systems.

The seminar also includes a panel discussion and several working groups.

Invited Speakers (preliminary list):

J. Backus (U.S.A.)	H.D. Mills (U.S.A.)
M. Broy (Germany)	U. Montanari (Italy)
R. Burstall (U.K.)	P. Naur (Denmark)
A.P. Ershov (U.S.S.R)	M. Nivat (France)
J. Horning (U.S.A.)	D.L. Parnas (U.S.A.)
J. Ichbiah (France)	J.C. Reynolds (U.S.A.)
C.B. Jones (U.K.)	D. Scott (U.S.A.)

Colloquium on Software Engineering (CSE)

In keeping with the overall theme of the conference, CSE should focus on those activities in software development where formal methods are most relevant. Thus, the main topics are:

- requirements analysis and specification
- software design and specification
- novel approaches to programming (functional, logic, object-oriented programming)
- definition of specification and programming languages based on concepts of formal semantics
- development of tools to support formal methods

In connection with these topics, papers should deal with the following questions:

- Can notions of software engineering be clarified with the help of formal concepts?
- Can concepts of formal semantics be applied in practical software development? Which supporting tools are needed?
- What experiences have been gained using formal methods and how are they related to the claims of their proponents?
- What alternatives to formal methods can be proposed?

Contributions related to these questions are also welcomed if they cover topics in software engineering other than those mentioned above.

Program Committee for CSE:

Ch. Floyd (Germany)	P. Löhr (Germany)
C. Haenel (Germany)	P. Naur (Denmark)
P. Henderson (U.K.)	M. Sintzoff (Belgium)
C.B. Jones (U.K.)	J. Thatcher (U.S.A.)
G. Kahn (France)	W. Turski (Poland)
W. Koch (Germany)	H. Weber (Germany)
C.H.A. Koster (Netherlands)	J. Witt (Germany)

Program Committee Chairwoman of CSE:

Prof. Dr. Christiane Floyd
 TU Berlin, Sekr. FR 5-6
 Franklinstrasse 28/29
 D-1000 Berlin 10 (West Germany)

Further on TAPSOFT

The sessions of CAAP'85 and CSE will be held in parallel. They will not overlap with seminar sessions. The official language of TAPSOFT is English.

TAPSOFT will be held at the Technical University of Berlin. It is organized by the TU Berlin and the GI (Gesellschaft für Informatik), and is supported by EATCS (European Association for Theoretical Computer Science).

For details about the conference (and the final program) contact:

Organizing Committee Chairman of TAPSOFT:

Wilfried Koch
TU Berlin, TAPSOFT-Sekr. FR 5-6
Franklinstrasse 28/29
D-1000 Berlin 10 (West Germany)

**TWELFTH INTERNATIONAL COLLOQUIUM ON AUTOMATA,
LANGUAGES AND PROGRAMMING (ICALP)**

July 15–19, 1985, Nafplion, Greece

The *12th Annual ICALP* meeting of the European Association for Theoretical Computer Science (EATCS) will be organized by the National Technical University of Athens in cooperation with the University of Hamburg. Papers presenting original contributions in any area of theoretical computer science are being sought.

Topics

Automata theory, formal language theory, analysis of algorithms, computational complexity, computability theory, mathematical aspects of programming language definition, logic and semantics of programming languages, program specification, theory of data structures, theory of data bases, cryptology, VLSI structures.

This is not meant to be an exclusive list.

Papers

Authors are invited to submit six copies of a full draft paper or extended abstract before **November 15, 1984** to the Chairman of the Program Committee:

Prof. Dr. W. Brauer
Department of Informatics
University of Hamburg
Rothenbaumchaussee 67/69
D-2000 Hamburg 13 (West Germany)
Tel. (040)4123 56 75; Telex 214 732 unihhd

Authors will be notified of acceptance/rejection by **February 1, 1985**. Final papers are due **April 1, 1985**.

Program Committee

K.R. Apt (Paris), J. Berstel (Paris), C. Böhm (Rome), W. Brauer, *Chairman* (Hamburg), J. de Bakker (Amsterdam), J. Diaz (Barcelona), J. Gruska (Bratislava), B. Monien (Paderborn), C. Papadimitriou (Athens), J. Paredaens (Antwerp), M. Paterson (Warwick), A. Paz (Haifa), A.L. Rosenberg (Durham), A. Salomaa (Turku), D.S. Scott (Pittsburgh), I.H. Sudborough (Evanston), P. Thiagarajan (Aarhus), E. Welzl (Graz), D. Wood (Waterloo), M. Yannakakis (Murray Hill)

Organizing Committee

C. Papadimitriou (*Chairman*), E.N. Protonotarios (*Secretary*)

Further Information

ICALP 85 will be held in Nafplion, a lovely city on the eastern coast of Peloponnesus. Nafplion was the first capital of Greece and offers many points of historical and ethnographic interest. In addition to the host hotel, there is at reasonable distance an abundance of hotels at a wide price range; camping facilities are also available. Further details about the conference (and the final program) will be sent automatically to anyone submitting a paper. Others should read the EATCS Bulletin or write in early 1985 to:

Professor E.N. Protonotarios
National Technical University of Athens
42, Patission Str.
Athens
Greece

or wait for announcements of the final program.